

REMARKS/ARGUMENTS

Various claims are being amended as shown above. The claim amendments clarify the claim language and are not intended to limit the scope of the claims, unless the claim language is expressly quoted in the following remarks to distinguish over the cited art. No new matter is being added by virtue of the amendments above.

In section 1 of the office action, the abstract was objected to because of length. In response, the abstract is being amended above in accordance with the requirements of MPEP 608.01(b). For the above reasons, Applicant requests reconsideration and withdrawal of the objection to the abstract.

In section 2 of the office action, the disclosure was objected to because of an informality regarding a typographical error. In response, the specification is being amended above to indicate that 10/099,372 is a continuation-in-part of 09/691,726. For the above reasons, Applicant requests reconsideration and withdrawal of the objection to the specification.

In sections 4-8, the drawings were objected to because of various informalities. In response, the specification is being amended above to add various reference characters shown in Figure 4. The elements, "defined timer", NLPs, IDLE, T_pulse, signal detector, and reset signal generator, are also being removed from the claims, in response to the drawing objections. No new matter is being added by the correction to the drawings and amendment to the specification. For the above reasons, Applicant requests

reconsideration and withdrawal of the objection to the drawings.

In section 9 of the office action, the drawings were objected to under 37 CFR. 1.83(b) because the drawings are allegedly incomplete. The Examiner states that the current drawings do not show "signal detectors", "timers and reset", "link detect", and "force hold" as disclosed in the specification. In response to the drawing objections, Figure 3 is being amended to show the signal detector 136 which is also a timer which acts to reset the state machine (which is typically in the processor 134 or implemented as the processor 134), as stated in page 11, line 10 in the originally filed specification. It is also respectfully asserted that the element "reset" is shown on Figure 5 as the PMA_RESET signal and is discussed on page 12, lines 7-10 of the filed specification. The element "link detect" is shown on Figure 5 as "LINK_DET" and can have "true" or "false" values as represented in Figure 5 by the arrows 240, 244, 255, 245, 248, 250, and 270. The element "force hold" is shown on Figure 5 as "FORCED_HOLD" and can have "true" or "false" values as represented in Figure 5 by the arrow 240. FORCED_HOLD is also shown in blocks 242, 246, and 280. Accordingly, the elements "reset", "link detect", and "force hold" are shown in the drawings. Figure 5 is being clarified to indicate that the element "reset" is PMA_RESET signal, the element "link detect" is "LINK_DET", and the element "force hold" is "FORCED_HOLD", consistent with the discussion in the filed specification.

For the above reasons, Applicant requests reconsideration and withdrawal of the previous objections to the drawings.

In section 11 of the office action, claims 26, 31, 33, 45, 50, 52, 62, 70, and 72 were rejected on the ground of non-statutory obviousness-type double patenting as allegedly being unpatentable over claims 1 and 17 of US Patent No. 6,460,078. Responsive to this rejection, Applicant is hereby filing herewith a terminal disclaimer to overcome the obviousness-type double patenting rejection that is alleged in the office action. Accordingly, Applicant respectfully requests the withdrawal of this double-patenting rejection.

In section 13 of the office action, claims 1-6, 8-17, and 61-79 were rejected under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the enablement requirement. Applicant respectfully traverses the rejection.

In response to the rejection, the claims are being amended above by removing the following term in the claims: "forced speed and duplex mode". The claims are also being amended above by removing the following terms in the claims: Normal Link Pulses, IDLE, and T_pulse.

Claim 61 is also being amended so that claim 61 is no longer a single means claim. Claims 62-79 depend on claim 61. Accordingly, claims 61-79 comply with the enablement requirement.

For the above reasons, Applicant requests reconsideration and withdrawal of the rejection under 35 U.S.C. §112, first paragraph.

In section 15 of the office action, claims 1-6, 8-17, 58, and 77 were rejected under 35 U.S.C. 112, second paragraph, as allegedly failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In response to the rejection, the claims 1, 6, 8, and 9 are being amended to overcome the rejection by removing the term "signals". Claims 3-5 and 15-17 are being amended to overcome the rejection by removing the terms, Normal Link Pulses, IDLE, and T_pulse. Claim 11 is being amended to correct a typographical error. Claims 40 and 61 are also being amended in order to clarify the term "transmitter and receiver" in claims 58 and 77. Claims 40 and 61 are base claims of claims 58 and 77, respectively.

For the above reasons, Applicant requests reconsideration and withdrawal of the rejection under 35 U.S.C. §112, second paragraph.

In section 18 of the office action, claims 1, 3-5, 8, 21-25, 27-30, 37-39, 40-44, 46-49, 56-61, 63-69, and 76-79 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Bontemps (U.S. Patent No. 5,923,663). Applicant respectfully traverses the rejection.

Bontemps is directed to an automatic media detection circuit 200 (Figure 2) with a select logic 214 that connects the contact pair 220a to the contact pair 204a (and connects the contact pair 220b to the contact pair 204b) in a first state, when the crossover signal (XOVER_SEL1) is low. The select logic 214 connects the contact pair 220a to the contact pair 204b (and connects the contact pair 220b to the contact pair 204a) in a second

state, when the crossover signal (XOVER_SEL1) is high (see Bontemps, column 8, lines 18-580. A LINK_DETECT1 signal is high if communication signals are detected in a link connected to the contacts 220a or 220b, and the LINK_DETECT1 signal is low if communication signals are not detected in the link (Bontemps, column 10, lines 44-63). The high value or low value of the crossover signal (XOVER_SEL1) depends on the LINK-DETECT1 signal value. When communication signals are detected in the link, the select logic 214 will hold the current state of the link and will no longer switch the link between the first state and the second state (Bontemps, column 11, lines 1-65). When communication signals are no longer detected in the link, the select logic 214 will resume in toggling the link between the first state and second state (Bontemps, column 11, lines 28-38). Therefore, Bontemps requires a switching from the first state to the second state (or vice versa) in response to communication signals not being detected in the link. Bontemps does not disclose the switching between states in a pseudo-random manner. For example, Bontemps does not disclose various features that are substantially recited in claim 1 such as, for example, "generating a controlling signal for selecting the first state and the second state, wherein the controlling signal has one of first and second values during each time period and wherein the values changes in a pseudo-random manner". Accordingly, claim 1 is patentable over Bontemps.

Independent claims 6, 8, 9, 21, 40, and 61 are also being amended to recite similar features above to

distinguish over Bontemps. Accordingly, claims 6, 8, 9, 21, 40, and 61 are each patentable over Bontemps.

Dependent claims 3-5, 22-25, 27-30, 37-39, 41-44, 46-49, 56-60, 63-69, 76-79 each depends from one of the independent claims above and are each patentable over Bontemps for at least the same reasons that their respective base claim is patentable over Bontemps. Furthermore, claims 3-5, 22-25, 27-30, 37-39, 41-44, 46-49, 56-60, 63-69, 76-79 each recites additional features in combination with the features recited in their respective base claims where the combination is not disclosed or suggested by Bontemps. Accordingly, each of the claims 3-5, 22-25, 27-30, 37-39, 41-44, 46-49, 56-60, 63-69, 76-79 is patentable over Bontemps.

For the above reasons, Applicant requests reconsideration and withdrawal of the rejection under 35 U.S.C. §102.

In section 27 of the office action, claims 2, 6, 9, 12, 14, and 15 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Bontemps. Applicant respectfully traverses the rejection.

The Examiner correctly admits in the office action that Bontemps does not teach implementing the method in software and utilizing a processor to control the switch. In an attempt to overcome the deficiencies of Bontemps, the Examiner states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method in software and utilize a processor to control the media switch to the system of Bontemps to improve the system flexibility.

However, Bontemps does not disclose various features that are substantially recited in claims 6 and 9 such as, for example, generating a controlling signal for selecting the first state and the second state, wherein the controlling signal has one of first and second values during each time period and wherein the values changes in a pseudo-random manner. Accordingly, claims 6 and 9 are each patentable over Bontemps.

Claims 2, 12, 14, and 15 are being amended above to recite additional features that are not disclosed or suggested by Bontemps. Accordingly, claims 2, 12, 14, and 15 are each patentable over Bontemps.

For the above reasons, Applicant requests reconsideration and withdrawal of the rejection under 35 U.S.C. §103.

In section 35 of the office action, claims 32, 51, and 71 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Bontemps. Applicant respectfully traverses the rejection.

The Examiner correctly admits in the office action that Bontemps does not teach using time periods of 50-60 milliseconds for a toggle time period. In an attempt to overcome the deficiencies of Bontemps, the Examiner states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to add using time periods of 50-60 milliseconds for a toggle time period to the system of Bontemps as a design choice.

Dependent claims 32, 51 and 71 each depends from one of the independent claims above and are each patentable

over Bontemps for at least the same reasons that their respective base claim is patentable over Bontemps.

Furthermore, claims 32, 51, and 71 each recites additional features in combination with the features recited in their respective base claims where the combination is not disclosed or suggested by Bontemps. Accordingly, each of the claims 32, 51, and 71 is patentable over Bontemps.

For the above reasons, Applicant requests reconsideration and withdrawal of the rejection under 35 U.S.C. §103.

Applicant respectfully requests allowance of all pending claims.

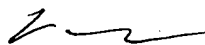
If the undersigned attorney has overlooked a teaching in the cited reference that is relevant to the allowability of the claims, the Examiner is respectfully requested to specifically point out where such teachings may be found.

CONTACT INFORMATION

If the Examiner has any questions or needs any additional information, the Examiner is invited to telephone the undersigned attorney at (805) 681-5078.

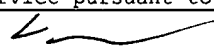
Date: March 12, 2007

Respectfully submitted,



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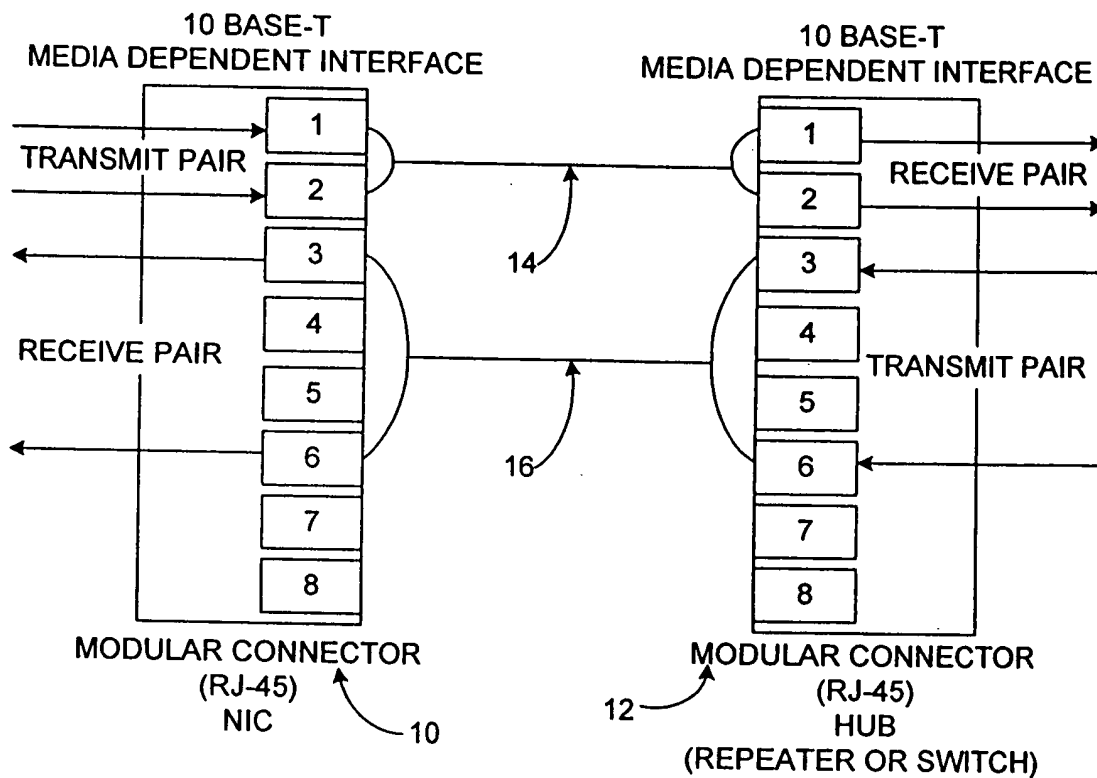


FIGURE 1

~~(BACKGROUND METHOD)~~
(prior art)

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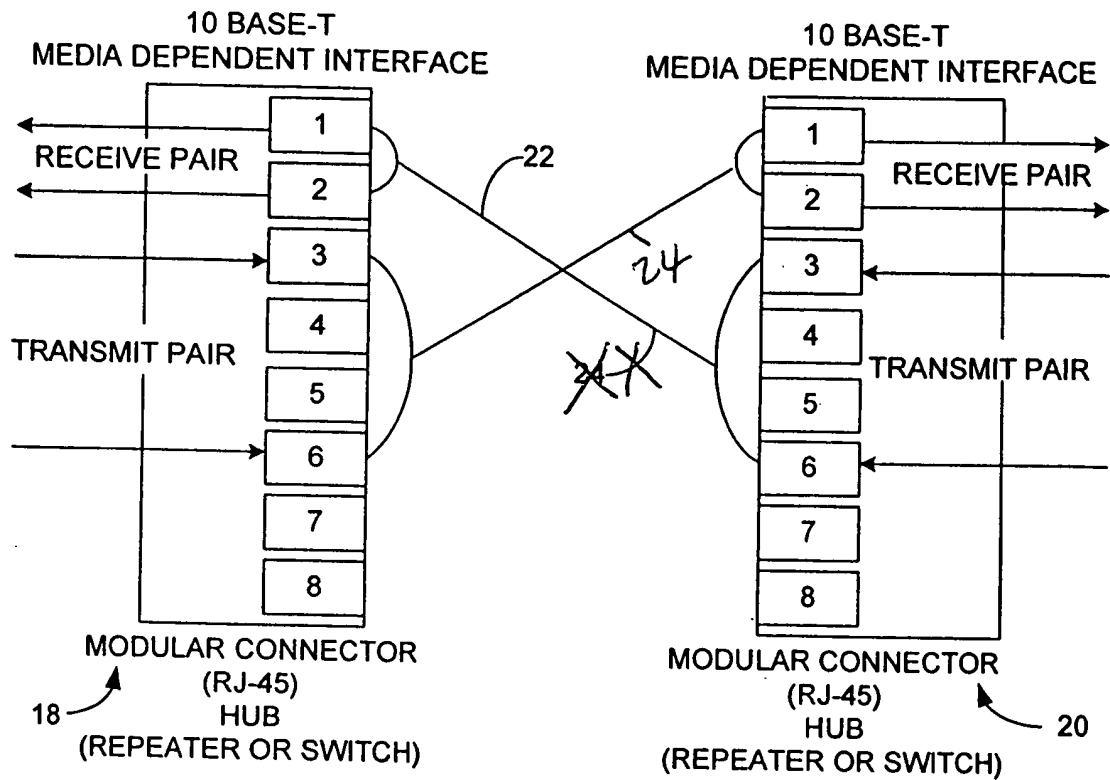


FIGURE 2

~~(BACKGROUND METHOD)~~
(prior art)

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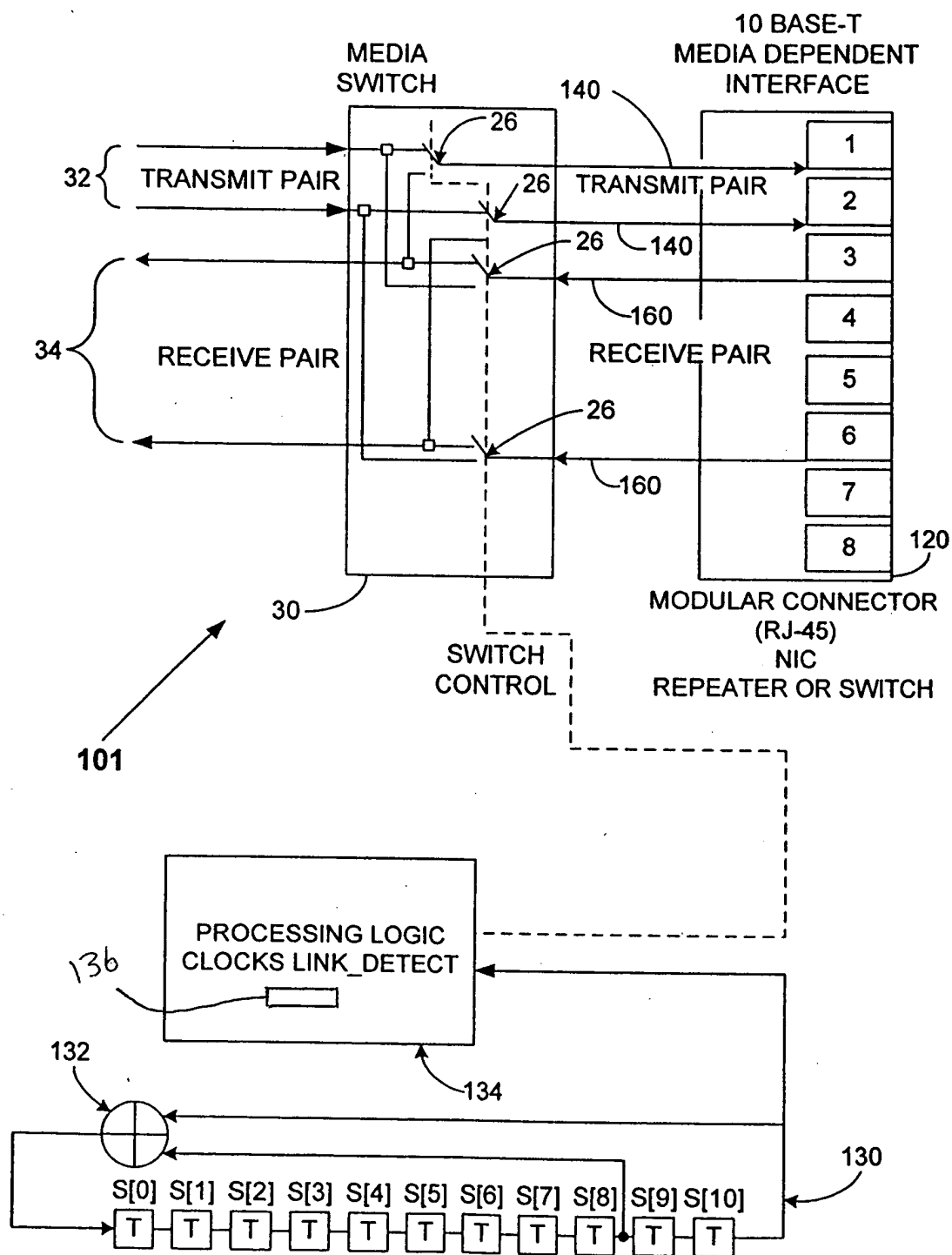
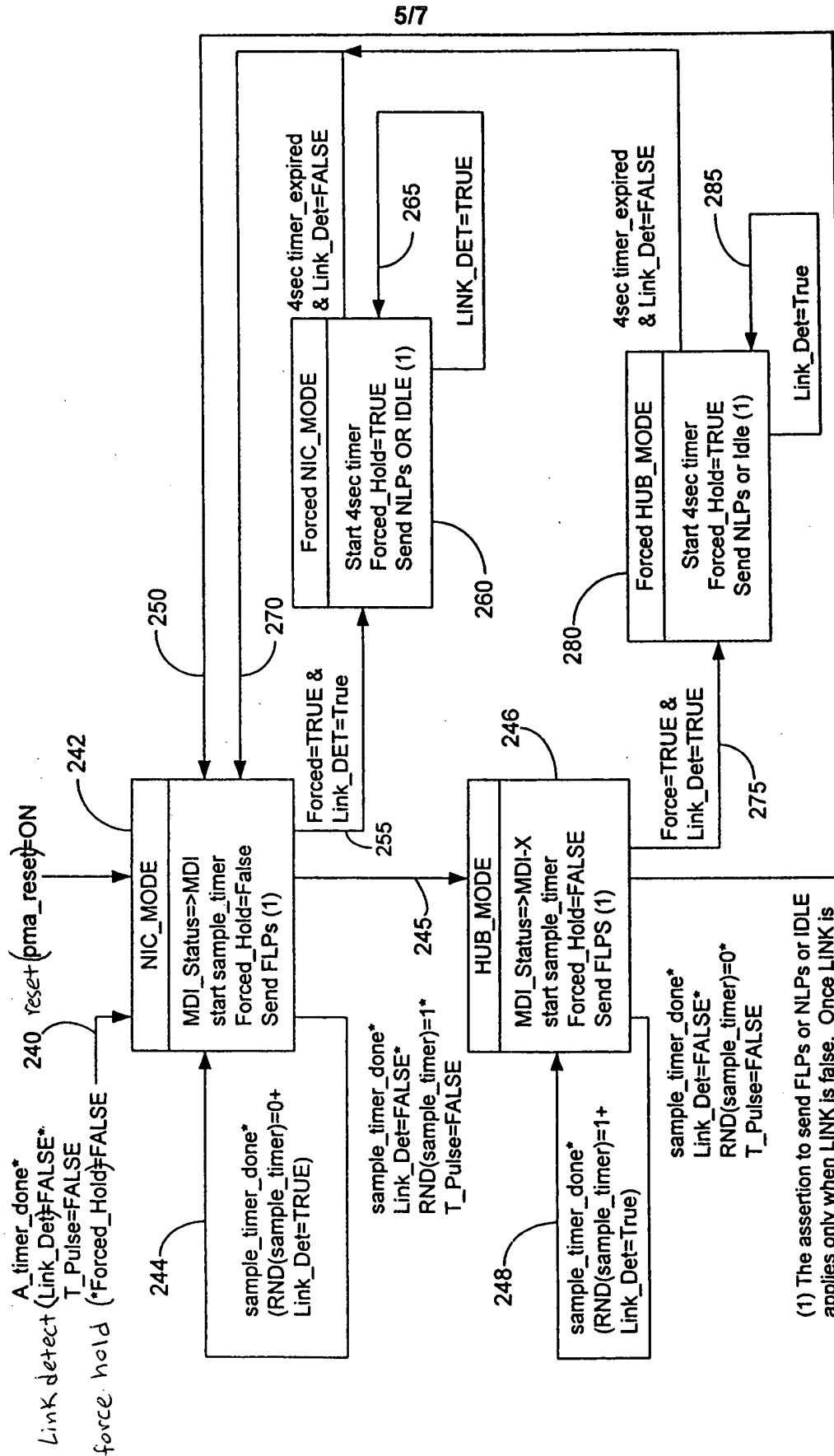


FIGURE 3



Forced Mode Auto-MDIX State Machine

FIGURE 5

(1) The assertion to send FLPs or NLPs or IDLE applies only when LINK is false. Once LINK is established, DATA may be transmitted.

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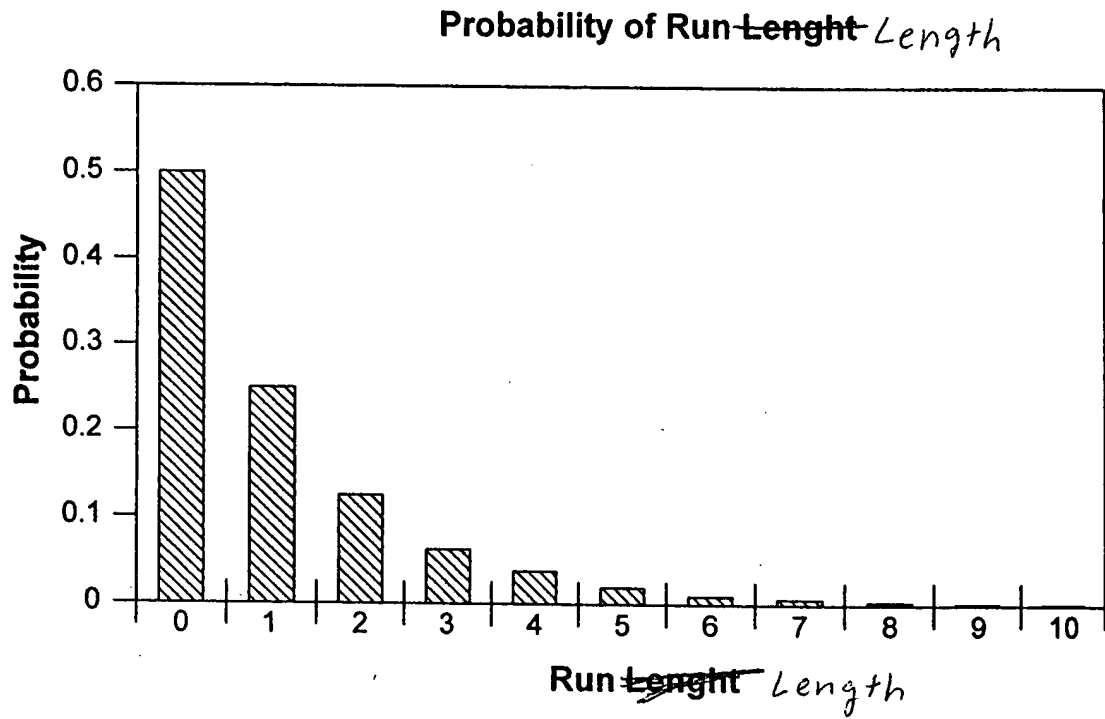


FIGURE 6